

General

Title

Advanced chronic kidney disease (CKD): percent of patients with documentation about counseling for increasing physical activity.

Source(s)

Renal Physicians Association. Appropriate patient preparation for renal replacement therapy. Rockville (MD): Renal Physicians Association; 2002 Oct 1. 78 p. (Clinical Practice Guideline; no. 3).

Measure Domain

Primary Measure Domain

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure assesses the percent of patients with advanced chronic kidney disease (CKD) with documentation about counseling for increasing physical activity.

Rationale

Exercise counseling improves measures of physical functioning and work capacity in non-renally impaired persons, reduces overall mortality, and prevents deterioration in physical functioning.

Physical activity is an important component of health. Physicians are encouraged in several national guidelines to recommend routinely that patients exercise regularly. Although physicians do not typically

advise patients about physical activity, they are more likely to counsel patients at high risk for a disease and patients with a known disease. Such counseling has been shown to result in sustained improvements in cardiorespiratory fitness in inactive adults without serious chronic diseases.

In patients on hemodialysis, interventions to increase physical activity have been shown in five studies to improve well-being and exercise capacity. A recent large controlled study showed that exercise training and encouragement can result in improvements in physical functioning in end-stage renal disease (ESRD) patients. Furthermore, even ESRD patients with low levels of physical functioning can benefit from exercise counseling in self-reported and objective measures of physical function. Two prospective studies of hemodialysis patients have shown that physical functioning is highly predictive of hospitalization and mortality, suggesting that exercise training or counseling may result in improved survival through its effect on physical functioning or other physiological outcomes. Exercise training has been reported in two studies to increase hemoglobin levels in hemodialysis patients.

Patients with advanced CKD may be better able than dialysis patients to undertake increased physical activity because usually they have better functional status and less co-morbidity. Furthermore, these patients may benefit more from exercise than patients on renal replacement therapy (RRT), as suggested by one study directly comparing the effects of exercise in pre-dialysis and dialysis patients.

The body of research testing the effect of exercise counseling or training in these patients demonstrates that, as in healthy individuals or dialysis patients, they can increase muscle strength and exercise capacity, however, the studies are too small to detect potential benefits of exercise on other health outcomes.

Exercise counseling studies indicate that improvements in performance-based measures of physical functioning and exercise capacity can occur without resource-intensive supervised exercise therapy. Furthermore, these studies suggest improvements in symptoms and quality of life.

Primary Clinical Component

Advanced chronic kidney disease; physical activity; counseling

Denominator Description

The number of adult patients with advanced chronic kidney disease (CKD), not currently receiving renal replacement therapy

Numerator Description

The number of patients from the denominator with documentation about counseling for increasing physical activity

Evidence Supporting the Measure

Evidence Supporting the Criterion of Quality

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

A systematic review of the clinical literature

Evidence Supporting Need for the Measure

Need for the Measure

Unspecified

State of Use of the Measure

State of Use

Pilot testing

Current Use

Internal quality improvement

Application of Measure in its Current Use

Care Setting

Ambulatory Care

Physician Group Practices/Clinics

Professionals Responsible for Health Care

Physicians

Lowest Level of Health Care Delivery Addressed

Individual Clinicians

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

Stratification by Vulnerable Populations

Unspecified

Characteristics of the Primary Clinical Component

Incidence/Prevalence

Unspecified

Association with Vulnerable Populations

Unspecified

Burden of Illness

Two prospective studies of hemodialysis patients have shown that physical functioning is highly predictive of hospitalization and mortality, suggesting that exercise training or counseling may result in improved survival through its effect on physical functioning or other physiological outcomes.

Evidence for Burden of Illness

Curtin RB, Lowrie EG, DeOreo PB. Self-reported functional status: an important predictor of health outcomes among end-stage renal disease patients. *Adv Ren Replace Ther.* 1999 Apr;6(2):133-40.

DeOreo PB. Hemodialysis patient-assessed functional health status predicts continued survival, hospitalization, and dialysis-attendance compliance. *Am J Kidney Dis.* 1997 Aug;30(2):204-12. [26 references] [PubMed](#)

Utilization

Unspecified

Costs

Unspecified

Institute of Medicine (IOM) Healthcare Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding

Users of care only

Description of Case Finding

Adult patients 18 years and older with advanced chronic kidney disease (CKD)

Denominator Inclusions/Exclusions

Inclusions

Adult patients age 18 years and older with chronic kidney disease stage 4 or 5 (glomerular filtration rate [GFR] less than or equal to 30 mL/min/1.73 m²), not currently receiving renal replacement therapy

Exclusions

Unspecified

Relationship of Denominator to Numerator

All cases in the denominator are equally eligible to appear in the numerator

Denominator (Index) Event

Clinical Condition

Denominator Time Window

Time window precedes index event

Numerator Inclusions/Exclusions

Inclusions

The number of patients from the denominator with documentation about counseling^{*} for increasing physical activity

^{*}Counseling includes documentation regarding discussion with the patient or a formal consultation with a physical therapist or an exercise program.

Exclusions

Unspecified

Measure Results Under Control of Health Care Professionals, Organizations and/or Policymakers

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

Numerator Time Window

Episode of care

Data Source

Administrative data

Laboratory data

Medical record

Level of Determination of Quality

Individual Case

Pre-existing Instrument Used

Unspecified

Computation of the Measure

Scoring

Rate

Interpretation of Score

Better quality is associated with a higher score

Allowance for Patient Factors

Unspecified

Standard of Comparison

Internal time comparison

Evaluation of Measure Properties

Extent of Measure Testing

Unspecified

Identifying Information

Original Title

Number of patients with documentation about counseling for increasing physical activity / number of patients with advanced CKD.

Measure Collection Name

Renal Physicians Association Clinical Performance Measures on Appropriate Patient Preparation for Renal Replacement Therapy

Measure Set Name

Clinical Performance Measures for Counseling and Rehabilitation Recommendations

Submitter

Renal Physicians Association - Medical Specialty Society

Developer

Renal Physicians Association - Medical Specialty Society

Funding Source(s)

Ortho Biotech Products, LP

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Financial Disclosures/Other Potential Conflicts of Interest

There were none disclosed.

Adaptation

Measure was not adapted from another source.

Release Date

2002 Oct

Measure Status

This is the current release of the measure.

Source(s)

Renal Physicians Association. Appropriate patient preparation for renal replacement therapy. Rockville (MD): Renal Physicians Association; 2002 Oct 1. 78 p. (Clinical Practice Guideline; no. 3).

Measure Availability

The individual measure, "Number of patients with documentation about counseling for increasing physical activity / number of patients with advanced CKD," is published in "Renal Physicians Association Clinical Practice Guideline #3: Appropriate Patient Preparation for Renal Replacement Therapy."

For more information, contact RPA at 1700 Rockville Pike, Suite 220, Rockville, MD 20852; phone: 301-468-3515; fax: 301-468-3511; Web site: www.renalmd.org ; e-mail: rpa@renalmd.org.

NQMC Status

This NQMC summary was completed by ECRI on May 23, 2003. The information was verified by the Renal Physicians Association on June 17, 2003.

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For more information, contact RPA at 1700 Rockville Pike, Suite 220, Rockville, MD 20852; phone: 301-468-3515; fax: 301-468-3511; Web site: www.renalmd.org ; e-mail: rpa@renalmd.org.

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